

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025707**Date Inspected:** 12-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Li Pengfei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Lift 6, 13AE**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dennis Combs, was present during the times noted above for the observations relative to the work being performed.

This Quality Assurance (QA) Inspector has performed documentation review of the Green Tag system utilized by American Bridge/Flour (ABF) and Caltrans METS. This QA Inspector has Identified Complete Joint penetration (CJP), Partial Joint Penetration (PJP), and Fillet Welds in Lift 13AE. He has also verified the Non-Destructive Testing requirements for each weldment that includes the NDT process (UT, MT, RT) and the percentage required by the contractor to perform. These items are within the Contract special provision, CCO 22 and within compliant of CCO 77. This information has been documented and compiled in a Green Tagging spread sheet that is located on the Caltrans Team China Z; drive.

ZHENHUA SHIP #18

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Internal Tower Ladder located in Tower Lift 6. This QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00683 dated May 11, 2011 and performed on May 12, 2011.

The following bolt sizes used on Internal Tower Ladder were:

M22 x 65 RC Lot # DHGM220016 and the final torque value established was 495 N-m.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Tower Head located in Tower Lift 6. This QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00683 dated May 11, 2011 and performed on May 12, 2011.

The following bolt sizes used on Tower Head Lift 6 were:

M16 x 50 RC Lot # DHGM160050 and the final torque value established was 187 N-m.
M16 x 55 RC Lot # DHGM160040 and the final torque value established was 193 N-m.
M16 x 55 RC Lot # DHGM160040 and the final torque value established was 203 N-m.(Bolt Head)
M16 x 65 RC Lot # DHGM160043 and the final torque value established was 233 N-m.(Bolt Head)
M20 x 50 RC Lot # DHGM200037 and the final torque value established was 367 N-m.
M20 x 55 RC Lot # DHGM200008 and the final torque value established was 367 N-m.
M20 x 75 RC Lot # DHGM200040 and the final torque value established was 287 N-m.
M20 x 80 RC Lot # DHGM200041 and the final torque value established was 263 N-m.
M22 x 65 RC Lot # DHGM220016 and the final torque value established was 495 N-m.
M20 x 70 RC Lot # DHGM200034 and the final torque value established was 263 N-m.
M24 x 70 RC Lot # DHGM240003 and the final torque value established was 543 N-m.

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Curved Tower Diaphragm located on Tower Lift 6. This QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00683 dated May 11, 2011 and performed on May 13, 2011 00:30.

The following bolt sizes used on Curved Tower Diaphragm Lift 6 were:

M16 x 50 RC Lot # DHGM160050 and the final torque value established was 187 N-m.
M16 x 55 RC Lot # DHGM160040 and the final torque value established was 193 N-m.
M16 x 55 RC Lot # DHGM160040 and the final torque value established was 203 N-m.(Bolt Head)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey 15000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Combs,Dennis	Quality Assurance Inspector
----------------------	--------------	-----------------------------

Reviewed By:	Riley,Ken	QA Reviewer
---------------------	-----------	-------------